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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/597,944

05/08/2007

Martin Paul Wilson

9811-002US

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79526

7590

05/13/2010

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EXAMINER

MOTTOLA, STEVEN J

ART UNIT

PAPER NUMBER

2817

MAIL DATE

DELIVERY MODE

05/13/2010

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/597,944	<b>Applicant(s)</b> WILSON, MARTIN PAUL	
	<b>Examiner</b> Steven J. Mottola	<b>Art Unit</b> 2817	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 4-18 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 7-11 is/are allowed.
- 6) ☒ Claim(s) 1,2,4-6,12-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)                        | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2, 4-6 & 12-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leitch in view of Seppinen et al.

Refer first to fig. 1 of Leitch. Transistor 18 may be read as a power amplifier for driving a load (antenna 30 in this case). It receives a modulated power supply voltage via choke 20 at its collector which is also connected to the output. Thus fig. 1 may be read on independent claims 1, 14 & 16 except for the resistive element claimed. However, it is known from fig. 2A of Seppinen et al. to have a damping resistor (unlabeled) in the supply circuit of an RF amplifier. It would have been obvious to include such a resistor in the supply circuit of the RF amplifier of Leitch in order to prevent undesired oscillations for instance. Such a resistor would inherently widen the operating range by reducing the 'Q' of the circuit. While 'low impedance' as recited in claim 1 is a relative term, the resistor value would be a result effective variable in that its effect on the output impedance would have been known in advance. It would further therefore have been obvious to choose a value to achieve the desired output impedance such as that specified in claim 18. The transistor 18 of Leitch may of course be read on the like element of claims 2 and 13, claim 13 being otherwise read on the references as claim 1. Choke 20 may be read as the supply feed inductance of claim 4 and re claim 5 the resistive element of Seppinen et al. is a resistor. Regarding claims 6,

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15 and 17 the reactive element claimed may be read on either inductor 106,110 of the supply circuit (fig. 2) of Leitch as they would be in series with the resistor. Regarding the resonant circuit of claim 17, the reactive components 20, 22, 24, 26,106,110 of Leitch with the proposed resistor would form a resonant circuit; appropriate choice of component values would result in the impedance of the resonant circuit lowering when the impedance of the amplifier output rises. This would have been obvious since as noted above the values of the impedance elements are result effective variables in that their effect on the frequency response would have been known in advance.

Claims 7-11 are allowed.

The prior art of record fails to disclose the capacitive element of claim 7 in the context claimed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven J. Mottola whose telephone number is 571-272-1766. The examiner can normally be reached on M-Th from 8 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert J. Pascal, can be reached on 571-272-1769. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://portal.uspto.gov/external/portal>.

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Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Steven J. Mottola/

Primary Examiner, Art Unit 2817